

ABSTRACT OF THE DISCLOSURE

A method and apparatus are provided for forming a sheet of polymeric material, such as polycarbonate. A forming mold is provided having halves that engage for forming a heated sheet therebetween. Each of the halves defines an interior cavity having a peripheral edge. The sheet is retained between the peripheral edges of the halves and a vacuum is generated within one of the cavities for drawing the sheet therein, whereby a sensing mechanism detects a draw depth for initiating a cooling mechanism to cool the sheet to a temperature below a glass transition temperature of the material. A series of retention mechanisms are provided about the peripheral edge of one of the halves, for biasing the sheet into engagement with the peripheral edge of the opposing half. A trimming mechanism is further provided for trimming the perimeter of the sheet to a desired form.